

## **The Application Of Multi-Beam Echosounder Systems To Habitat Delineation**

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### **PROJECT DESCRIPTION:**

Multi-beam echosounder systems are enabling detailed bathymetric surveys of coastal and offshore features. Through a combined approach utilizing the MBES and psuedo-sidescan backscatter data, a detailed interpretation of the seabed can be made. The results of these interpretations can provide the basis for addressing environmental questions with waterway improvement and waterway management. Examples of MBES surveys from coastal California and Alaska will be presented.

**PROGRESS TO DATE:** To date, MBES habitat surveys have been completed off Morro Bay, California, in the Gulf of Alaska, and in Glacier Bay National Park. Additional surveys are being planned at this point in time. Data collected is being processed for enhanced DTMs and mosaics, allowing interpretation of bottom types and geologic features.

**FUTURE PLANS:** Additional surveys are being identified in support of Marine Protected Areas, Essential Fish Habitat, and to document specific coastal development concerns. Evolving processing procedures are enabling more refined analysis of psuedo-sidescan data and the backscatter component.

**PRODUCTS:** The enhanced DTMs and Mosaics will provide benefit to waterway planners and managers in determining the appropriate approach to waterway development while sustaining habitats and resources associated.